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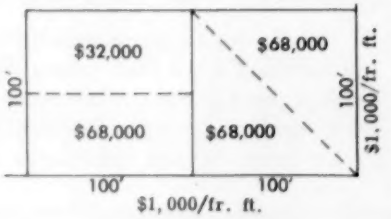
Real Estate Economists, Appraisers and Counselors

CORNER INFLUENCE

WE believe that every appraisal which includes a value called corner influence should have an explanation of how it was determined. If a simple factor is used, the appraiser should explain to the client how this factor was obtained. In our appraisals we prefer to use a "long-hand" method of explaining value added because of corner influence. Most of the appraisal manuals and textbooks which we have in our library show some kind of explanation of how to compute value to be added because of corner influence. While all of these different methods we have reviewed have some merit, we would like to introduce in this article still another method which takes into account a principle which is overlooked by most of the other methods. That principle is that corner influence will depend upon both the width of the lot on the main street and the depth of the lot on the side street. In other words, we feel that corner influence must be distributed along both frontages, varying with the distance from the corner itself.

Before getting into a detailed discussion of our approach it is essential that a limiting statement be made. As with all other mechanical devices used by appraisers, answers must be tempered by judgment. The value of a piece of property is not always increased by its location on a corner, nor, if it is increased, is it always by the same percentage. For example, at a major intersection, with stop-and-go signals backing up traffic and limiting turning movements, the corner property may be less desirable than one which is removed by several hundred feet from this intersection. In general, however, downtown corner properties in particular do have extra value over interior lots, and the appraiser should use a reasonable approach in estimating the extent of this added value.

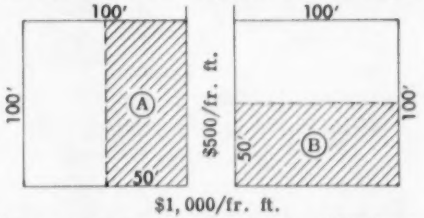
As a basic premise in our approach to corner influence we believe that such influence can be applied to a corner property up to a distance of 100 feet from the corner on both streets. We will also accept the corner influence factor of 60%, which most systems use when computing corner influence. We have tried to determine how this 60% factor can be justified as the maximum corner influence. On the accompanying sketch are shown two 100-foot x 100-foot lots. On the left is an interior lot, and on the right a corner lot. In this example we are assuming that each street has $1,000 per front foot value for a depth of 100 feet.



According to the depth factors shown on the table at the end of this article, the front 50 feet of the interior lot contains 68% of this lot's total value. This means that the front half of the lot has an estimated value of $68,000, while the rear half of the lot has a value of $32,000. Now in the case of the corner lot, as shown on the sketch, it could be divided into two triangular pieces with 100-foot bases on each frontage. The average depth of each of these triangular pieces would be 50 feet. Again using the 68% factor for a 50-foot depth, we find that each triangular piece would have an estimated value of $68,000, or a total lot value of $136,000. This value is 36% more than the $100,000 interior lot.

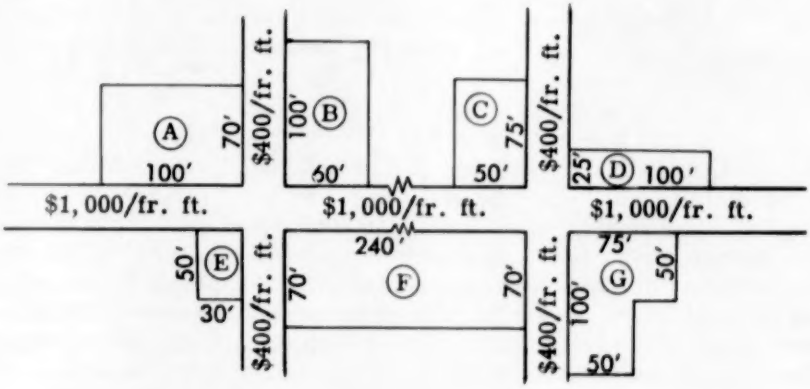
This 36% increase in value is considerably less than what most appraisers are using for maximum corner influence. Therefore, we assume that the difference between 36% and 60% is explained by the added advantages of advertising, accessibility, light and air, and pedestrian traffic. In the remainder of this article we will use this assumed factor of 60% as the maximum corner influence which can be applied to the optimum lot 100 feet x 100 feet in size. If either dimension is reduced, the amount of corner influence would also be reduced.

In the method we are explaining here, we use the depth factors contained in the table at the end of this article to adjust for lots with widths and/or depths below the 100-foot x 100-foot lot. For example, if the corner lot to be appraised has only a 50-foot frontage with a side street depth of 100 feet, we believe that the corner influence which should be assigned to this lot is 68% (depth factor) of the total corner influence of the 100-foot x 100-foot lot in its place. The 50-foot lot which is missing would carry a corner influence value, if added to the 50-foot corner lot, of 32% of the total corner influence. By the same token, if the corner lot being appraised has a frontage of 100 feet on the main street, but only a depth of 50 feet on the side street, we believe that not only must the base front footvalue on the main street be adjusted by the 68% factor, but also the total corner influence of a lot 100 feet x 100 feet must carry the 68% factor. The accompanying sketch illustrates this reasoning.



The total corner influence of each of the two corners, if 100 feet x 100 feet, would be $30,000 (60% of $500 x 100 feet). Lot A above, being only 50 feet wide, would carry a corner influence based on the depth table of only 68% of the 100-foot x 100-foot lot's total corner influence, or $20,400 (68% of $30,000). Lot B in this illustration would similarly carry 68% of the maximum corner influence, or also $20,400. Total value of lot A would be $70,400 (50 feet x $1,000 + $20,400 corner influence). Total value of lot B would be $88,400 (100 feet x $1,000 x .68 depth factor + $20,400 corner influence).

On the following page is an illustration showing various sized corner lots. Using constant front foot values, we show a brief analysis for each lot of the computations used in computing corner influence. (To simplify the computation process we have developed a guide for this purpose which is shown, along with the depth factor table, at the end of this article.)



METHODS FOR COMPUTING LAND VALUES FOR TYPICAL LOTS

Lot A - Base value - 100' x $1,000 x .82 (depth factor)	$ 82,000
C. I. - for lot 100' x 100' (.60 x $400 x 100') = $24,000	
For lot 70' deep, $24,000 x .82	19,680
Total Lot Value . . .	$101,680
Lot B - Base value - 60' x $1,000	$ 60,000
C. I. - for lot 100' x 100' (.60 x $400 x 100') = $24,000	
For lot 60' wide, $24,000 x .75	18,000
Total Lot Value . . .	$ 78,000
Lot C - Base value - 50' x $1,000 x .85 (depth factor)	$ 42,500
C. I. - for lot 50' x 75' ($24,000 x .68 x .85)	13,870
Total Lot Value . . .	$ 56,370
Lot D - Base value - 100' x $1,000 x .48 (depth factor)	$ 48,000
C. I. - for lot 100' x 25' ($24,000 x .48).	11,520
Total Lot Value . . .	$ 59,520
Lot E - Base value - 30' x $1,000 x .68 (depth factor)	$ 20,400
C. I. - for lot 30' x 50' ($24,000 x .52 x .68)	8,490
Total Lot Value . . .	$ 28,890
Lot F - Base value - 240' x $1,000 x .82 (depth factor)	$196,800
C. I. - for lot 100' x 70' ($24,000 x .82)	19,680
For 2d lot 100' x 70' ($24,000 x .82)	19,680
Total Lot Value . . .	$236,160
Lot G - Base value - 50' x $1,000	$ 50,000
and - 25' x $1,000 x .68 (depth factor)	17,000
C. I. - for lot 50' x 100' ($24,000 x .68)	16,320
For lot 25' x 50' ($24,000 x .68 x .17*)	2,770
Total Lot Value . . .	$ 86,090

* .85 for 75' less .68 for 50'

There is considerable disagreement over the question of whether any corner influence should be added for lots within 100 feet of an intersection but not located on the corner. In other words, should a 25-foot lot which adjoins a 25-foot corner lot be assigned added value because of its proximity to the corner? We generally believe that it should. However, the basic 60% corner influence factor cannot be used, since it does not have the advantages of accessibility, light and air, and advertising which the corner lot has. We prefer to revert to the basic locational advantage of 36%, which was illustrated at the beginning of this article. Our method of estimating the value of an interior lot in proximity to, but not on, a corner is as follows. First, we would compute the 36% total influence for a 100-foot x 100-foot lot. Next, we would compute that portion of the total influence which the corner lot would carry. After this, the remainder of the corner influence can be assigned by using differences in the factors contained in the depth table.

Let us assume that we have a 25-foot corner lot with a depth of 100 feet. The value of the high frontage is $1,000 per front foot. The value of the side street frontage is $500 per front foot. Adjoining this corner lot is another 25-foot x 100-foot lot. Total corner influence, using the 36% factor for a 100-foot x 100-foot lot, would be $18,000 (.36 x $500 x 100 feet). The 25-foot corner lot would be assigned 48% of this total, or $8,640. The next 25 feet, which is the lot being appraised, would be assigned 20% of the total influence, or $3,600. The 20% factor was obtained by subtracting the 25-foot factor of 48% from the 50-foot factor of 68%.

In appraising commercial properties, probably the most reliable estimate of land value will result from the application of the income approach. However, since we should show more than one approach to value, it is necessary to estimate the corner lot's value by analysis of sales data in the vicinity. As a means of achieving uniformity in computing corner lot values, we have developed the foregoing method. In our opinion, the approach used in this article provides as nearly equitable and reasonable results as any we have seen so far.

James R. Appel
JAMES R. APPEL

BASIC FACTS		
Main street frontage	(a) ft.	
Depth along side street	(b) ft.	
Main street front foot value	(c) $	
Side street front foot value	(d) $	
Depth factor for (a)	(e) %	
Depth factor for (b)	(f) %	
COMPUTATION		
(a) x (c) x (f)		(g) $
100 feet x (d) x 60%	(h) $	
(h) x (e) x (f)		(i) $
Total Value Corner Lot (g) + (i)		$

Depth table to be used in connection with the calculations suggested in the table to the left. (See August 1949 Appraisal Bulletin for information concerning the Wenzlick depth table.)

Depth of lot to be appraised	Standard depth	Depth of lot to be appraised	Standard depth
10'	34%	110'	105%
20'	44	120'	109
30'	52	130'	113
40'	61	140	118
50'	68	150'	122
60'	75	160'	126
70'	82	170'	130
80'	88	180'	134
90'	94	190'	137
100'	100	200'	140